

REMARKS

By the present amendment, the presentation of the flexural rigidity feature definition has been clarified in claims 1 and 9, and antecedent bases have been introduced for “multilayer film” in claims 4 and 12 and for “base material” in claims 7 and 15.

Claims 1-20 are pending in the present application. Independent claim 1, and claims 2-8 and 17-18 dependent directly or indirectly thereon, are directed to an optical film. Independent claim 9, and claims 10-16 and 19-20 dependent directly or indirectly thereon, are directed to a liquid crystal display.

In the Office Action, claims 1-20 are rejected as indefinite. It is alleged in the Office Action that, in claims 1, 3 and 9, the terms “film” and “plate” are contradictory, and in claims 1 and 9, the phrases “wherein when the force applied to one end of the film” and “the force applied to one end of the film” are unclear. In addition, it is alleged that the terms “a center” in claims 1 and 9, “a multilayer film” in claim 4, “a base material” in claim 7, lack antecedent basis.

The objection to the terms “films” and “plate” is respectfully traversed. These terms are clearly conventional in the art, as shown by the Kameyama reference (US 6,088,079) cited in the Office Action, which uses the same terminology. Thus, a person of ordinary skill in the art would immediately understand a structure involving an optical film that comprises a lamination including a polarizing plate. Accordingly, it is submitted that this objection should be withdrawn.

Further, the presentation of the flexural rigidity feature has been clarified in claims 1 and 9, and antecedent bases have been introduced in claims 4 and 7 as well as claims 12 and 15 as suggested in the Office Action. Regarding the term “a center” in claims 1 and 9, it is submitted that the expression “the strip is bent at a center in a longitudinal direction of the strip” properly

introduces the term “center.”

In view of the above, it is submitted that the rejection should be withdrawn.

Next, in the Office Action, claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by US 6,088,079 to Kameyama et al. (Kameyama). It is alleged in the Office Action that the flexural feature of the present claims is inherent in the construction of Kameyama.

The rejection is respectfully traversed. Kameyama discloses an optical element of the prior art type with a high rigidity. Reference is made in particular to the passage at col. 15, lines 1-10 of Kameyama, which discloses the structure of an optical element comprising a cholesteric layer and a polarizer layer with an arrangement of layers in the following order:

- cholesteric liquid crystal polymer film
- pressure-sensitive adhesive layer
- quarterwave plate
- pressure-sensitive adhesive layer
- polarizing plate

Further, Kameyama discusses the thicknesses of the respective layers as follows:

- cholesteric film: substrate is generally 500 microns or less, preferably 5 to 200 microns, more preferably from 10 to 100 microns (col. 5, lines 50-53), and cholesteric layer: generally 50 microns or smaller, preferably from 0.5 to 20 microns, more preferably from 1 to 10 microns (col. 5, line 64 to col. 6, line 1)
- pressure-sensitive adhesive layer: 1 to 500 microns, preferably from 2 to 200 microns, more preferably from 5 to 100 microns (col. 14, lines 59-60)

- quarterwave plate (retardation layer): generally from 5 to 500 microns, preferably from 10 to 300 microns, more preferably from 20 to 200 microns (col. 10, lines 41-43)
- polarizing plate: 5 to 80 microns, but not limited thereto (col. 11, lines 28-30), and in particular, the preferred dichroic polarizer has a transparent protective layer which is 500 microns or smaller, more preferably 1 to 300 microns (col. 11, lines 55-57)

Moreover, Kameyama selects the thickness of the substrate “from the standpoints of light transmittance, strength, etc.” (Col. 5, line 53) and the thickness of the cholesteric layer “from the standpoints of preventing uneven orientation or a decrease in transmittance and of the wavelength region where circular dichroism is exhibited” (col. 6, line 1). In the example of Kameyama, a thickness in the middle of the preferred range is selected (50 microns for the substrate and $4 \times 1.5 = 6$ microns for the cholesteric layer).

Further, Kameyama is not concerned about rigidity or even thickness of an optical film, but only about strength and transmittance, i.e., resistance and optical properties. Accordingly, Kameyama does not teach or suggest reducing the rigidity or the thickness. If a person of ordinary skill in the art followed the teachings of Kameyama as illustrated in the example of Kameyama, and selected all thicknesses in the middle of the most preferred range, the optical element of Kameyama would have the following thicknesses:

- cholesteric layer: about 56 microns
- adhesive layer: about 50 microns
- retardation layer: about 100 microns
- adhesive layer: about 50 microns
- polarizing layer: about 40 microns

- protective layer: about 150 microns
- Total: about 436 microns

This total thickness is in the order of the thickness in comparative Ex. 1 in Table 1 on page 14 of the present specification. Comparative Ex. 1 shows that an optical film having a thickness of 420 microns provided insufficient flexibility, as reported in Table 1 of the present application.

In summary, the optical film of Kameyama has a high thickness and a low flexural rigidity, and Kameyama is not concerned about reducing the flexural rigidity. Therefore, the presently claimed invention is not anticipated by, and not obvious over, Kameyama.

In view of the above, it is submitted that the rejection should be withdrawn.

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Serial Number: 10/068,910

Group Art Unit: 1772

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 50-2866.

Respectfully submitted,

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